

### M12 male 0° / male 0° X-cod. shielded

TPE 4x2x26AWG SF/UTP CAT6a bu UL/CSA. CMR 7.5m

Art.No.: 7700-51001-S4X0750

Weight: 0.523

Country of origin: CZ

Model designation: MSXAL0-XA-08D\_S4X\_7.5-ZS

### Advantages of our connectors:

Our connectors are versatile and specially optimised for industrial environments. All connectors are 100% tested during the manufacturing process to ensure the highest quality and reliability.

The contacts are gold-plated, which ensures optimum conductivity. Thanks to the high degree of protection, the connectors are ideal for demanding industrial environments. They are also vibration-resistant - this is ensured by the union nut with vibration protection.

Our connectors are resistant to oils and cooling lubricants, but resistance to aggressive media should be tested for each specific application. Different cable lengths available [on request](#)

If you are missing technical information? Please feel free to use our [dictionary](#) to find more technical details.

### Product details:

Plastic housings with good resistance against chemicals and oils.

The resistance to aggressive media should be individually tested for your application. Further details on request.

Ethernet CAT6A

Male straight – male straight

M12 – M12, 8-pole

X-coded

without cable sleeves

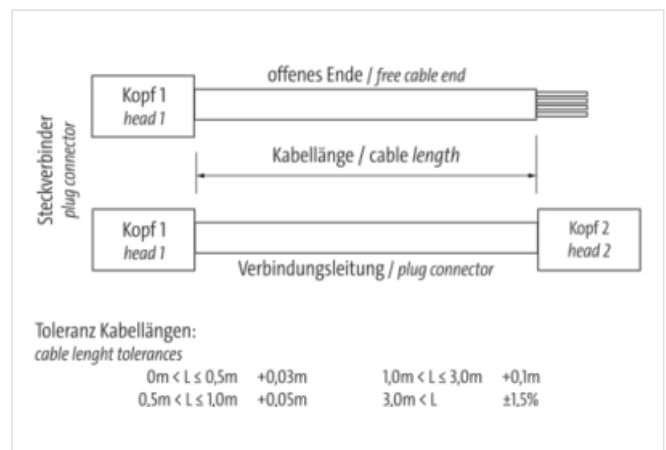
shielded

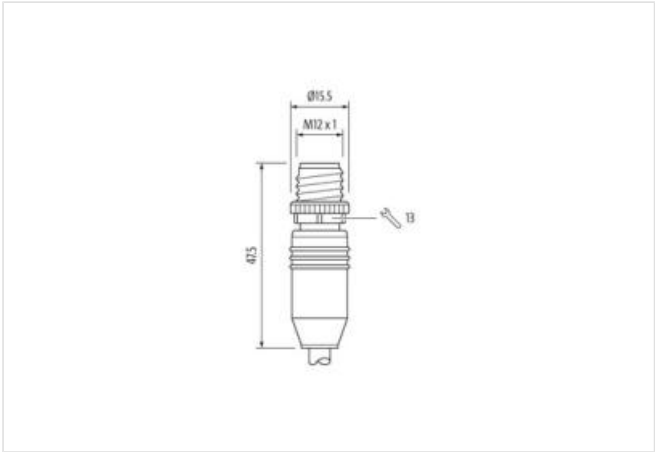
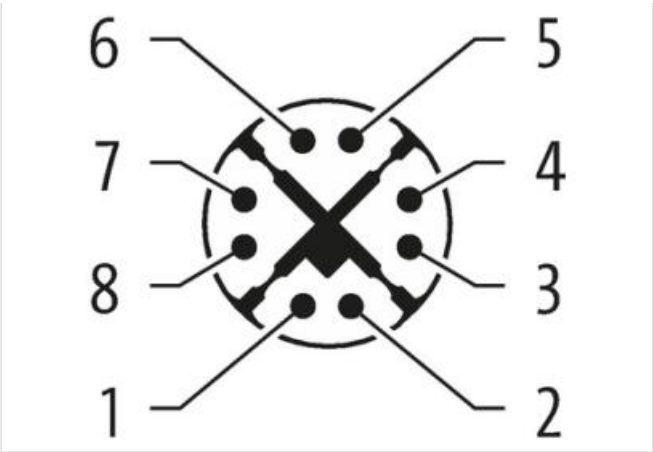
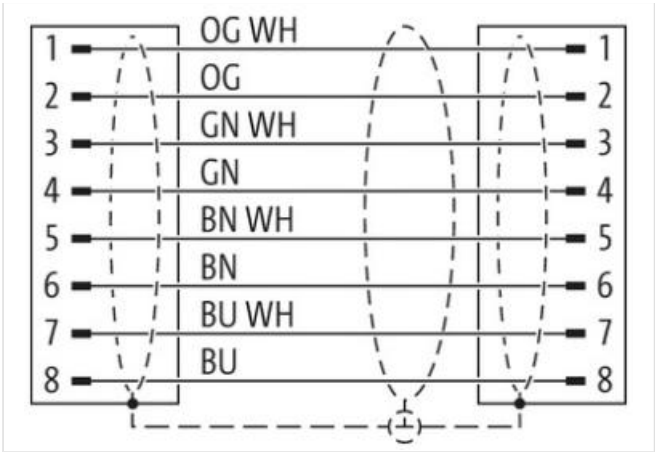
Transmission properties with channel transmission up to 50 m

Further cable lengths on request.

### Link to Product

#### Illustration





Product may differ from Image



|                                     |                   |
|-------------------------------------|-------------------|
| Cable length                        | 7,5 m             |
| Side 1                              |                   |
| Tightening torque                   | 0,6 Nm            |
| Mounting method                     | inserted, screwed |
| Coating contact                     | gold plated       |
| Family construction form            | M12               |
| Thread                              | M12 x 1           |
| Gender                              | male              |
| Cable outlet                        | straight          |
| Coding                              | X                 |
| Material contact                    | Copper alloy      |
| Material                            | PUR               |
| No. of poles                        | 8                 |
| Width across flats                  | SW13              |
| Degree of protection (EN IEC 60529) | IP67              |
| Side 2                              |                   |
| Tightening torque                   | 0,6 Nm            |
| Mounting method                     | inserted, screwed |

|                                     |              |
|-------------------------------------|--------------|
| Coating contact                     | gold plated  |
| Family construction form            | M12          |
| Thread                              | M12 x 1      |
| Gender                              | male         |
| Cable outlet                        | straight     |
| Coding                              | X            |
| Material contact                    | Copper alloy |
| Material                            | PUR          |
| No. of poles                        | 8            |
| Width across flats                  | SW13         |
| Degree of protection (EN IEC 60529) | IP67         |

#### Commercial data

|                       |               |
|-----------------------|---------------|
| ECLASS-6.0            | 27061801      |
| ECLASS-7.0            | 27061801      |
| ECLASS-8.0            | 27061801      |
| ECLASS-9.0            | 27061801      |
| ECLASS-10.1           | 27060307      |
| ECLASS-11.1           | 27060307      |
| ECLASS-12.0           | 27060307      |
| ETIM-5.0              | EC002599      |
| customs tariff number | 85444290      |
| customs tariff number | 85444290      |
| EAN                   | 4048879689960 |
| EAN                   | 4048879689960 |
| Packaging unit        | 1             |
| Packaging unit        | 1             |

#### Electrical data | Supply

|                                    |       |
|------------------------------------|-------|
| Operating voltage DC max.          | 60 V  |
| Current operating per contact max. | 1,5 A |

#### Industrial communication

|                             |                                                   |
|-----------------------------|---------------------------------------------------|
| Transfer parameters         | CAT6, Class EA (ISO/IEC 11801:2002), (EN 50173-1) |
| Data transmission rate max. | 10 GBit/s                                         |

#### Diagnostics

|                       |    |
|-----------------------|----|
| Status indication LED | no |
|-----------------------|----|

#### Device protection | Electrical

|                                     |        |
|-------------------------------------|--------|
| Degree of protection (EN IEC 60529) | IP67   |
| Pollution Degree                    | 3      |
| Rated surge voltage                 | 1,5 kV |
| Material group (IEC 60664-1)        | I      |

#### Environmental characteristics | Climatic

|                                        |                            |
|----------------------------------------|----------------------------|
| Operating temperature min.             | -25 °C                     |
| Operating temperature max.             | 85 °C                      |
| Additional condition temperature range | depending on cable quality |

#### Important installation notes

|                        |                                                                                                                                                       |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Note on strain relief  | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.                                                   |
| Note on bending radius | <b>Attention:</b> Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces. |

#### Installation | Cable

|                      |                                                                                        |
|----------------------|----------------------------------------------------------------------------------------|
| wire arrangement     | (orange-white, orange), (blue-white, blue), (brown-white, brown), (green-white, green) |
| Cable identification | S4X                                                                                    |
| Function cable       | Data                                                                                   |

|                                                   |                                                                                        |
|---------------------------------------------------|----------------------------------------------------------------------------------------|
| Jacket Color                                      | blue                                                                                   |
| Type of Certificate                               | cURus                                                                                  |
| Amount stranding                                  | 4                                                                                      |
| Stranding                                         | 2 wires twisted                                                                        |
| Amount stranding (type 2)                         | 1                                                                                      |
| Stranding (type 2)                                | 4 Stranded joints around Insulation element twisted                                    |
| Banding                                           | Foil                                                                                   |
| Filler                                            | Insulation element                                                                     |
| wire arrangement                                  | (orange-white, orange), (blue-white, blue), (brown-white, brown), (green-white, green) |
| Cable length max.                                 | 66 m                                                                                   |
| Cable weight                                      | 65,48 g/m                                                                              |
| Material jacket                                   | TPE                                                                                    |
| Freedom from ingredients (jacket)                 | lead-free, CFC-free                                                                    |
| Outer-diameter (jacket)                           | 7,4 mm                                                                                 |
| Tolerance outer diameter (sheath)                 | ± 5 %                                                                                  |
| Material wire insulation                          | HDPE                                                                                   |
| Amount wires                                      | 8                                                                                      |
| Outer diameter insulation                         | 0,9 mm                                                                                 |
| Outer diameter tolerance core insulation          | ± 5 %                                                                                  |
| Ingredient freeness wire insulation               | lead-free, CFC-free                                                                    |
| Amount strands (wire)                             | 7                                                                                      |
| Diameter of single wires                          | 26 AWG                                                                                 |
| Conductor crosssection (wire)                     | 26 AWG                                                                                 |
| Material conductor wire                           | copper stranded wire, tinned                                                           |
| Nominal voltage AC max.                           | 600 V                                                                                  |
| Current load capacity (standard)                  | to DIN VDE 0298-4                                                                      |
| Current load capacity min. wire                   | 2 A                                                                                    |
| Characteristic impedance                          | 100 Ω @ 100 MHz                                                                        |
| Electrical resistance line constant wire          | 212 Ω/km @ 20 °C                                                                       |
| AC withstand voltage (wire - wire)                | 1,5 kV @ 2 s                                                                           |
| Electrical capacity line constant (wire - wire)   | 84850 pF/km                                                                            |
| Power frequency withstand voltage (wire - jacket) | 1,5 kV @ 2 s                                                                           |
| Loop resistance                                   | 424 Ω/km                                                                               |
| Min. operating temperature (static)               | -40 °C                                                                                 |
| Max. operating temperature (fixed)                | 80 °C                                                                                  |
| Operating temperature min. (dynamic)              | -40 °C                                                                                 |
| Operating temperature max. (dynamic)              | 80 °C                                                                                  |
| Storage temperature min.                          | -40 °C                                                                                 |
| Storage temperature max.                          | 80 °C                                                                                  |
| Flame resistance                                  | IEC 60332-2-2   UL 1581 § 1100 FT2   UL 1581 § 1090                                    |
| chemical resistance                               | Good, application-related testing                                                      |
| Gasoline resistance                               | Good, application-related testing                                                      |
| Oil resistance                                    | DIN EN 60811-404   Good, application-related testing                                   |
| Bending radius (fixed)                            | 4 x Outer diameter                                                                     |
| Bending radius (dynamic)                          | 4 x Outer diameter                                                                     |
| No. of bending cycles (C-track)                   | 35 Mio. @ 25 °C                                                                        |
| Traversing distance (C-track)                     | 0,6 m @ 25 °C                                                                          |
| Travel speed (C-track)                            | 1,2 m/s @ 25 °C                                                                        |
| No. of torsion cycles                             | 3 Mio. 25 °C                                                                           |
| Torsion stress                                    | ± 270 °/m @ 25 °C                                                                      |
| Torsion speed                                     | 60 cycles/min 25 °C                                                                    |